

SOV/69-21-1-8/21

The Dispersing Action of Cavitation.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut (The
Moscow Oblast Pedagogical Institute).

SUBMITTED: November 28, 1957

Card 2/2

SOV/76-33-9-36/37

5(4)

AUTHORS: ~~Kudryavtsev, B. B.~~, Kudryavtsev, N. T.

TITLE: Sergey Vasil'yevich Gorbachev (On His 60th Birthday)

PERIODICAL: Zhurnal fizicheskoy khimii , 1959, Vol 33, Nr 9,
pp 2115 - 2116 (USSR)

ABSTRACT: On August 17, 1959 the renowned physicochemist Professor S. V. Gorbachev celebrated his 60th birthday. He studied at the Moskovskiy gosudarstvennyy universitet (Moscow State University) where he dealt with scientific problems, assisted by his colleagues P. A. Rebinder, V. K. Semchenko, V. V. Tarasov, K. A. Putilov, Yu. V. Khodakov, N. A. Shishakov et al and under the supervision of Professor B. V. Il'in. From 1921 to 1938 he worked at the Tsentral'nyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut, Moskva (Moscow, Central Scientific Chemico-pharmaceutical Research Institute). He dealt with all fields of physical chemistry. In cooperation with O. Yu. Magidson et al. he devised a new method of preparing iodine from petroleum drilling water. Together with N. B. and V. B. Miller he made fundamental measurements of partial pressures over salt mixtures during the oxidation of bromides

Card 1/2

Sergey Vasil'yevich Gorbachev (On His 60th Birthday)

SOV/76-33-9-36/37

with chlorine. Between 1932 and 1936 he established a physico-chemical laboratory at the Gosudarstvennyy geofizicheskiy institut (State Institute of Geophysics), where he investigated elementary processes in aerosols. Since 1930 he has been teaching chemistry at the Moskovskiy khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (Moscow Institute of Chemical Technology imeni D. I. Mendeleev), first as Docent, and later as Professor of the Chair of Physical Chemistry. In 1941 he wrote his doctor's dissertation on the theory of the development of a new phase, which formulated observations made by Tamman. Besides other research work, S. V. Gorbachev together with N. P. Zhuk, A. V. Izmaylov, Ya. I. Vabel et al systematically investigated the influence exercised by temperature upon electrochemical processes. Together with V. A. Mil'chev he investigated the electrolysis of aqueous solutions up to 200° C (and presently up to 300°C). In cooperation with O. B. Khachaturyan and V. A. Mil'chev he devised methods of calculating polarization in the electrolysis of redox systems. For his scientific and pedagogical merits S. V. Gorbachev was awarded the Lenin Order, the Badge of Honor, and three medals. There is 1 figure.

Card 2/2

KUDRYAVTSEV, Boris Borisovich; DROZHZHIN, Yu.N., red.; NATAPOV, M.I.,
tekhn.red.; KORNEYEVA, V.I., tekhn.red.

[Textbook on physics; heat and molecular physics] Kurs fiziki;
teplota i molekuliarnaya fizika. Moskva, Gos.uchebno-pedagog.
izd-vo M-va prosv.RSFSR, 1960. 209 p. (MIRA 13:9)
(Heat) (Molecular theory)

KUDRYAVTSEV, B. B.

PHASE I BOOK EXPLANATION SON/5207

1. Vsesoyuznaya konferentsiya professorov i pedagogov pedagogicheskikh institutov. Prezentatsiya ultrazvukov i isledovaniya vobshchestva (Utilization of Ultrasonics for the Investigation of Matter). Moscow, Izd. MGU, 1960. 267 p. 1,000 copies printed. (Series: Its Trudy, v. 11)

Ed. (Title page): V.F. Kozlov, Professor and B.B. Kudryavtsev, Professor.

PURPOSE: This collection of articles is intended for physicists specializing in the physics of ultrasound.

CONTENTS: The collection of articles constitutes the transactions of the VII Conference on the Applications of Ultrasonics to the Study of Materials, which was held at the Moscow Oblast Pedagogical Institute named N.K. Kruglyakova. Individual articles of the collection discuss various problems in the mechanics of ultrasound, the absorption and the propagation mechanics of ultrasonic waves in various media, the operating principles and design of sonar and receivers of the ultrasonic waves, the speed of sound and methods for its determination. Other articles deal with the applications of ultrasonics to investigations of the properties of materials. No personalities are mentioned. References accompany

Kozlov, V.F., and V.F. Kozlov [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Elementary Theory of the Crystal Transformer Operating as a Receiver 89

Kozlov, V.F. [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Some Problems of the Theory of Crystal Transformers 91

Kozlov, V.F. [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Propagation of Speeds of Sound in Binary Mixtures 93

Kozlov, V.F. [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Theory of Molecular Acoustics 95

Kozlov, V.F. [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Nature of the Stokes Factor 97

Kozlov, V.F. [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Hydrodynamic Theory of the Propagation of Sound Waves in a Liquid 99

Kozlov, V.F., and A. Opilskii [Department of Physics of the Agricultural College of Orel]. Verification of the Interpretation of Acoustic Concentration Curves 101

Kozlov, V.F., and V.F. Kozlov [Moscow Oblast Pedagogical Institute named N.K. Kruglyakova]. Experimental Basis of Methods for Using Multiple Echoes to Investigate Liquid Media at Low Frequencies 103

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 105

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 107

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 109

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 111

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 113

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 115

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 117

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 119

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 121

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 123

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 125

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 127

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 129

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 131

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 133

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 135

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 137

Kozlov, V.F., and V.F. Kozlov [Institute of Acoustics of the USSR Academy of Sciences]. Investigation of the Propagation of Sound Waves in a Liquid 139

Card 4/7

(17)

PLATE I BOOK KRYONATON 809/5207

Primeneniye ultrazvukov i issledovaniye veshchestv (Utilization of Ultrasonics for the Investigation of Matter) Moscow, Izd. MFTI, 1960. 267 p. 1,000 copies printed. (Series: Its Truly, 77p. 11)

Ed. (title page): V.P. Pavlov, Professor and B.B. Kulyavskiy, Professor.

Summary: This collection of articles is intended for physicists specializing in the physics of ultrasound.

Contents: The collection of articles constitutes the transactions of the VII Conference on the Applications of Ultrasound to the Study of Materials, which was held at the Moscow Obshchepedagogicheskoye Institut (Moscow General Pedagogical Institute) in 1959. The collection contains various articles on the theory and application of ultrasound, the absorption and the propagation of sound in various media, the operating principle and design of transmitters and receivers of ultrasound waves, the speed of sound and methods for its determination. Other articles deal with the applications of ultrasound to investigations of the properties of materials. No formalities are mentioned. References accompany the articles.

Utilization of Ultrasound (Cont.)

809/5207

Pavlov, V.P., and B.B. Kulyavskiy (Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov). Propagation of Sound in Dispersive Media 165

Malyukov, B.L. [Zhukov Pedagogical Institute]. Determination of the Speed of Ultrasound from the Periodic Variations of the Phase Relations of Two Acoustic Pulses 173

Konova, R.P., and B.B. Kulyavskiy (Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov). Speed of Sound in Aqueous Solutions of K_2SO_4 181

Shilovskiy, A.S., and B.B. Kulyavskiy (Liberal Pedagogical Institute - Kuznetsk Pedagogical Institute, M.K. Kravtsov). Investigation of the Propagation of Ultrasound Waves in Three-Liquid Mixtures Whose Components Have Different Interaction Patterns 191

Konova, R.P., and B.B. Kulyavskiy (Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov). Distribution of Acoustic Measurements in the Study of Density Fluctuations in Liquids 201

Olitskiy, A.A. [Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov]. Diffraction of Light on Rapid Ultrasoundic Waves 205

Petrovskiy, I.I., and V.P. Pavlov (Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov). New Method Using Interferometer to Measure Absorption of Ultrasound 213

Shirshovich, M.G. [Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov]. Investigation of the Speed of Propagation and Absorption of Ultrasound in Liquid Phase Methyl Alcohol Near the Critical Region 219

Malyukov, B.L. [Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov]. Investigation of Temperature Dependence of Sliding and Volumetric Viscosity of Certain Organic Liquids in the Critical Region 225

Rodin, Yu.P., and V.S. Pribludov (Odessa Polytechnical Institute - Odessa Polytechnic). Device for Measuring the Intensity of an Ultrasoundic Field in Conducting Liquids 233

Petrovskiy, I.I., and V.P. Pavlov (Moscow Obshchepedagogicheskoye Institut, M.K. Kravtsov). Relaxation Processes in Van Der Waals Gases 239

Nerzhikov, L.G. [LVI in V.I. Ul'yanov (Leningrad Electrotechnical Institute, V.I. Ul'yanov (Leningrad))]. Absorption of Ultrasound and X-ray Waves in Certain Crystals 247

Pavlov, V.P. Lecture Room Demonstrations With Ferrite Ultrasound Radiators 253

Bulletin 265

AVAILABLE: Library of Congress (QC234.V82)

21/10/1960

NOZDREV, V.F., prof., red.; KUDRYAVTSEV, B.B., prof., red.

[Application of ultrasonic waves for the investigation of
materials] Primenenie ul'trasakustiki k issledovaniu
veshchestva. Pod red. V.F.Nozdreva i B.B.Kudriavtseva.
Moskva, Izd-vo MOPI. No.10. 1960. 321 p. (MIRA 13:8)
(Ultrasonic waves--Industrial applications)
(Materials--Testing)

S/058/62/000/003/056/092
A061/A101

AUTHOR: Kudryavtsev, B. B.

TITLE: Waves of two kinds, propagating in gels

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 38, abstract 3G306 (Sb. "Primeneniye ul'traakust. k issled. veshchestva". no. 12, Moscow, 1960, 31-39)

TEXT: Longitudinal elastic oscillations of two kinds propagate in gel-type colloidal systems. Oscillations of the 1st kind propagate in liquid medium - filler system (in jelly-like gel - water) at a velocity characteristic of this medium. Oscillations of the second kind propagate through the colloidal structure at a much lower velocity. The propagation velocity of the second kind waves in jelly-like gel is a few meters per second. The phenomena, observed in the propagation of sound in jelly-like gel, can be simulated with liquid-filled rubber sponges. In this case, one also observes the propagation of waves of two kinds, one of which is determined chiefly by the properties of the liquid filler, and the other by the sponge properties. ✓

[Abstracter's note: Complete translation]

Card 1/1

40332

S/194/62/000/006/117/232
D256/D308

24.1800

AUTHORS: Akhaladze, V.P., and Kudryavtsev, B.B.

TITLE: Measurements of absorption of ultrasound in solutions in the presence of an external electric field

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-5-35 y (V. sb. primeneniye ul'traakust. k issled. veshchestva, no. 12, M., 1960, 177-187) ✓.

TEXT: The investigation concerns the possible effect of electric fields, parallel and perpendicular to the direction of the sound, upon the propagation of the sound in solutions of polar liquids in non-polar solvents. The velocity and the absorption of ultrasound was measured using optical method of light diffraction on the ultrasonic waves. The experimental system is described and a block diagram of the el. circuits is presented. The measurements were carried out for binary mixtures benzene - nitro-benzene and n-heptane - nitrotoluene at frequencies 8 to 19 Mc/s and at a temp. of 21°C. The el. field was produced using two electrodes submerged in-
Card 1/2

Measurements of absorption of ...

S/194/62/000/006/117/232
D256/D308

to the liquid investigated. No regular effect of the el. field on the absorption of ultrasound could be established. The observed deviation of the coef. of absorption from its mean value did not exceed the experimental error of the installation. 11 references. ✓
[Abstracter's note: Complete translation.]

Card 2/2

24, 1800
S/058/62/000/003/058/092
A061/A101

AUTHORS: Ryazanov, A. I., Kudryavtsev, B. B.

TITLE: Problem of the depolarizing action of ultrasonics

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 43, abstract 30350 (Sb. "Primeneniye ul'traakust. k issled. veshchestva", no. 12, Moscow, 1960, 189-198)

TEXT: Ultrasonic vibrations in the electrolytic evolution of hydrogen under pulsed acoustic irradiation display a significant depolarizing action by reducing the electrode potential. The depolarizing effect diminishes with increasing current density, and does not depend on the electrode nature for the metals examined (Cu, brass, Ni, Fe). The depolarizing effect is determined by the amount of ultrasonic energy supplied to the electrolyzer per unit time. ✓B

[Abstracter's note: Complete translation]

Card 1/1

PHASE I BOOK EXPLOITATION

SOV/6180

Kudryavtsev, Boris Borisovich

Ul'traakusticheskiye metody issledovaniya veshchestva (Ultrasonic Methods of Investigating Matter) Moscow, Uchpedgiz, 1961.
132 p. 12,000 copies printed.

Ed.: Yu. N. Drozhzhin; Tech. Ed.: M. I. Smirnova.

PURPOSE: This book is intended for physicists and engineers interested in ultrasonic methods of investigating the properties of materials.

COVERAGE: This book deals with ultrasonic methods of investigating the properties of solids, liquids, and gases. Methods of producing elastic waves of various frequencies and techniques of acoustic measurement are described. There are 250 references, mainly English and Soviet. No personalities are mentioned.

TABLE OF CONTENTS:

Ch. I. General Information on Sound and Ultrasonic Measurements

3

Card 1/2

KUDRYAVTSEV, Boris Borisovich, prof.; FEDCHENKO, V., red.; YEGOROVA, I.,
tekhn. red.

[World in a grain of sand; a story of simple things] Mir v pes-
chinke; rasskaz o prostykh veshchakh. Moskva, Izd-vo TsK
VLKSM "Molodaia gvardiia," 1961. 157 p. (MIRA 15:3)
(Physics—Experiments) (Microcosm and macrocosm)

KUDRYAVTSEV, Boris Borisovich; GRIGOROVA, V.A., red.; KRYUCHKOVA, V.N.,
tekhn.red.

Mikhail Vasil'evich Lomonosov. Izd. 4. Moskva, Gos. izd-vo
fiziko-matem. lit-ry, 1961. 167 p. (MIRA 15:2)
(Lomonosov, Mikhail Vasil'evich, 1711-1765)

S/058/62/000/004/081/160
A061/A101

AUTHORS: Ryazanov, A. I., Kudryavtsev, B. B.

TITLE: Problem of the depolarizing effect of ultrasonics

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 39, abstract 4G323 (Sb. "Primeneniye ul'traakust. k issled. veshchestva", no. 13, Moscow, 1961, 219-239)

TEXT: The effect of a standing ultrasonic wave (21.3 kc) on electrode processes in the electrolytic recovery of hydrogen from 0.5n.KON on an iron cathode was observed. The dependence of the cathode potential E for different intensities of ultrasonics (up to 0.5 w/cm²), different densities of the electrolytic current (up to 15.7 ma/cm²), and at various temperatures (20 - 60°C) was determined. At low intensities of ultrasonics, there was a slight linear drop of E with a rise of intensity. When a certain intensity (varying with current density) was attained, E dropped sharply ($\Delta E = 450$ mv for a cathode potential of $\sim 1,300$ mv), and cavitation took place in the electrolyte. The sharp drop of E was not observed at high current densities, not even when the intensity of ultrasonics was the highest. The discontinuity of ΔE was independent of temperature.

Card 1/2

Problem of the depolarizing effect of ultrasonics

S/058/62/000/004/081/160
A061/A101

The results are qualitatively explained from the viewpoint of the electrolysis theory. ✓

L. Zarembo

[Abstracter's note: Complete translation]

Card 2/2

S/058/62/C00/004/070/160
A058/A101

AUTHOR: Kudryavtsev, B. B.

TITLE: Concerning the interaction of molecules of a liquid

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 36, abstract 40301
(V sb. "Primeneniye ultraakust. k issled. veshchestva". v. 13,
Moscow, 1961, 323-327)

TEXT: The author examines some distinctive features of Lennard-Jones-
interaction between vibrating molecules of a liquid. He determines the mean
attractive and repulsive forces, and shows that repulsive forces predominate.

[Abstracter's note: Complete translation]

Card 1/1

15435
8/058/63/000/001/104/120
A062/A101

27.1800

AUTHORS: Akhaladze, V. P., Kudryavtsev, B. B.

TITLE: Influence of electrostatic fields on ultrasonic propagation in high polymer solutions

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 68, abstract 12h407
(In collection: "Primeneniye ul'trazvuk. k issled. veshchestva".
no. 15, Moscow, 1961, 117 - 127)

TEXT: Results are reported of a study on the influence of an electrostatic field on the propagation of ultra-sound at frequencies 5 - 15 Mc/s in solutions of polar polymers in non-polar liquids. Measurements were carried out in solutions of benzol-polymethyl-methacrylate, toluol-polymethyl-methacrylate and benzol-polystyrol at room temperature for different concentrations. To find out the influence of an electrostatic field on the ultra-sound absorption, use was made of a specially elaborated photoelectric method in which the absolute value of the ultra-sound absorption in the absence of an electric field was determined by Bazhulin's method, and the relative value by a photometric

Card 1/2

Influence of electrostatic fields on...

8/058/63/000/001/104/120
A062/A101

method. The accuracy of the method is estimated as $\sim 0.1\%$. In all the measurements there was found no influence of the electrostatic field on the absorption and speed of ultra-sound. A large additional absorption of ultra-sound is noted in the investigated solutions despite the absence of relaxation phenomena. If the polymer molecules are represented in the form of loose small clouds, then it may be assumed that the additional absorption is brought about by friction in the relative motion of the polymer molecules in the solution.

E. Denisov

[Abstracter's note: Complete translation]

Card 2/2

KUDRYAVTSEV, B.B.

Interaction of the molecules of a liquid. Zhur. fiz. khim. 35 no.3:696 Mr '61.
(Liquids, Kinetic theory of) (MIRA 14:3)

KAPUSTIN, Aleksandr Pavlovich; LEMLEYN, G.G., prof., retsenzent;
KUDRYAVTSEV, B.B., prof., retsenzent; SBITNIKOVA, I.S., red.
izd-va; SHUBENIKOV, A.V., akademik, otv. red.; SIMKINA, G.S., tekhn. red.

[Effect of ultrasound on the kinetics of crystallization]
Vliianie ul'trazvuka na kinetiku kristallizatsii. Moskva,
Izd-vo Akad. nauk SSSR, 1962. 106 p. (MIRA 15:3)
(Ultrasonic waves) (Crystals—Growth)

KUDRYAVTSEV, B.B., prof.

Properties of the surface of liquids; laboratory on a desk.
IUn.tekh. 6 no.4:76-77 Ap '62. (MIRA 15:6)
(Surface chemistry)

S/058/63/000/001/108/120
A062/A101

AUTHORS: Ryazanov, A. I., Kudryavtsev, B. B.

TITLE: Dependence of the depolarizing effect of ultra-sound on the pH of a solution

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 70, abstract 12H418
(In collection: "Primeneniye ul'trazvuk. k issled. veshchestva".
no. 16, Moscow, 1962, 13 - 24)

TEXT: The effect of ultra-sound on the process of electrolytic separation of hydrogen from a 0.25 standard solution of $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ on a Fe cathode was investigated. Measurements were carried out in an electrolyzer made of organic glass. The electrode potentials were measured by the direct compensation method. The acidification of the solution was effected with the aid of chemically pure sulfuric acid, the alkalination with the aid of caustic soda of analytically pure quality. Measurements of the pH of the solutions were carried out by means of a tube potentiometer. Thermostating of the installation was realized with an accuracy to 1°C . The intensity of the ultra-sound vibrations was 0.5 watts/cm^2 .

Card 1/2

S/058/63/000/001/108/120
A062/A101

Dependence of the depolarizing effect of...

The measurements were carried out under conditions of originating a stationary sound wave. The article gives graphs of the dependence of the depolarization effect and of the ultra-sound potential on the pH of the solution for the range of the investigated temperatures and current densities. The reduction of the overload under the action of ultrasonic vibrations is maximum in the case of neutral solutions and smaller in the case of acid and strong alkaline solutions. The values of the depolarization effects, obtained for various electrolytes, fall well on a common curve representing the dependence of the depolarization effect on the pH of the solution. Comparing the obtained experimental data with the theory leads to the conclusion that ultrasonic depolarization is not only related with the intermixing and with the desorption effect of cavitation bubbles, but results from a deeper effect of the ultrasonic vibrations on the individual steps of the general discharge reaction of hydrogen ions (expansion of the O-H bonds in alkaline solutions, ion dehydration in acid solutions).

I. Ratinskaya

[Abstracter's note: Complete translation]

Card 2/2

S/058/63/000/001/109/120
A062/A101

AUTHORS: Ryazanov, A. I., Kudryavtsev, B. B.

TITLE: About the depolarizing effect of ultra-sound

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 70, abstract 1Zh419
(In collection: "Primeneniye ul'traskust k issled. veshchestva".
no. 16, Moscow, 1962, 25 - 32)

TEXT: An investigation was made on the process of the ultrasonic effect on the energy of the activation A in an electrochemical process of separating hydrogen from a 0.25 standard solution of $\text{Na}_2\text{SO}_4 \cdot 10\text{H}_2\text{O}$ under conditions of a constant potential E of the polarized electrode; the pH of the solution was 6.3. Isopotential straight lines of the dependence of the current density i on the inverse magnitude of the absolute temperature $1/T$ are plotted for $E = 800, 900, 1,000$ and $1,200$ millivolt. The angle φ of the slope of the straight lines yields $A = -2.3 R \tan \varphi$ (R is gas constant) in an ultrasonic field and without that field. It is found that the ultra-sound reduces the magnitude of A ; and this to the larger extent the smaller the value of E . At sufficiently large values of

Card 1/2

About the depolarizing effect of ultra-sound

8/058/63/000/001/109/120
A062/A101

E the change of A is equal to zero. In that case the ultrasonic field exerts an influence only on the kinetics of the diffusion process through intermixing. On the basis of measurements of A in an ultrasonic field and without that field coefficient α is calculated which determines the active portion of the electrode potential. It is shown that an ultrasonic field has an influence only on the limiting stages of the electrode process. ✓

I. Kanevskiy

[Abstracter's note: Complete translation]

Card 2/2

3/058/62/000/012/027/048
A160/A101

AUTHORS: Nikonov, K. P., Kudryavtsev, B. B.

TITLE: The measuring of the absorption of ultrasound in liquids by the method of flow

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 74 - 75, abstract 12066
(In collection: "Primeneniye ul'traakust. k issled. veshchestva".
M., no. 16, 1962, 183 - 190)

TEXT: A description is given of a simplified method of measuring the absorption of ultrasound. The theoretical investigations lead to the following formula for the absorption coefficient:

$$\alpha = \frac{\eta_{\text{pc}}^2 k}{2 (r_2 - r_1) U^2},$$

Card 1/3

S/058/62/000/012/027/048
A160/A101

The measuring of the absorption of...

where η is the viscosity of the investigated liquid, V - the flow speed, ρ_c - the acoustic resistance of the medium into which the sound is radiated, U - the voltage on the emitter, k - the constant for which the calculational formula is given, r_1 and r_2 - the distance to the emitter in the tube. The measurements were carried out on frequencies of 1, 2, 3, 4, 5 and 6 Mc. The diameter of the tube was 32 - 31 mm, the diameter of the quartz - 35 mm. The results of measuring the coefficient of absorption in toluene and ethyl alcohol are presented in 2 tables. To eliminate the exterior effect, the chamber was placed in a thermostat. A special investigation was carried out of the liquid flow in the outlet tube, caused by the heat effect, at various positions of the tube. Based on the results of these measurements, a curve was plotted, showing the dependence of the flow speed on the square of the voltage on the emitter. The measurements in ethyl alcohol were conducted on a frequency of 250 kc in a tube with a diameter of 58 mm. It is noted that the heat flow was observed in 3 - 4 minutes, and attained as steady-state in 10 - 15 minutes. To increase the accuracy, the speed was measured on each frequency at 4 - 5 different voltages on the emitter. A tuning of the emitter to the maximum emission affected especially the flow speed. Based on the results of the experiments, the following conclusions are drawn: 1) when

Card 2/3

The measuring of the absorption of...

S/058/62/000/012/027/048
A160/A101

measuring the sound absorption in the liquid by the flow method, the determination of the sound intensity can be avoided, whereby the accuracy of the method is not affected; 2) it is necessary to take into consideration the heat effect of the sound absorption, which has an effect on the flow caused by the sound. The results of such measurements agree well with the data of other authors.

I. Nikolayeva

[Abstracter's note: Complete translation]

Card 3/3

KUDRYAVTSEV, B.B.

Calculation of the configurational heat capacity of liquids.
Zhur.fiz.khim. 36 no.5:1117 My '62. (MIRA 15:8)
(Liquids) (Heat capacity)

KUDRYAVTSEV, B.B.; POKLONOV, A.P.

"Use of electronic apparatus and circuits in physicochemical research." by N.G.Alekseev, V.A.Prokhorov, K.V.Chmutov.

Reviewed by B.B.Kudriavtsev, A.P.Poklonov. Zhur.fiz.khim. 36
no.5:1124 My '62. (MIRA 15:8)

(Chemistry, Physical and theoretical)

(Electronic apparatus and appliances)

(Alekseev, N.G.) (Prokhorov, V.A.) (Chmutov, K.V.)

S/275/63/000/002/018/032
D405/D301

AUTHORS: Ryazanov, A.I. and Kudryavtsev, B.B.

TITLE: Dependence of depolarizing effect of ultrasound on pH value of solution

PERIODICAL: Referativnyy zhurnal, Elektronika i ee primeneniye, no. 2, 1963, 16, abstract 2V100 (Primeneniye ul'tra-alaist. k issled. veshchestva, no. 16, M., 1962, 13-24)

TEXT: The dependence of the depolarizing effect of ultrasound on the pH of the solution was investigated in the process of electrolytic liberation of hydrogen from a 0.25 pH solution of $\text{Na}_2\text{SO}_4 \cdot 10 \text{ H}_2\text{O}$ on an iron cathode (Armco iron) by means of a special electrolyzer of organic glass. The cathode potentials were measured by the direct compensation method. A tube potentiometer was used for determining the pH of the solutions. The setup was thermostatically controlled to an accuracy of 1° . The intensity of the ultrasonic vibrations was 0.5 watt/cm^2 , the acoustic power was 50 watt

Card 1/2

Dependence of depolarizing ...

S/275/63/000/002/018/032
D405/D301

and the resonance frequency of the magnetostriction vibrator was 21.3 kc. The measurements were conducted in a standing sound-wave field. It was found that with increasing temperature the absolute value of the depolarizing effect remains unchanged for each pH value; the depolarizing effect is maximal in the liberation of hydrogen from neutral solutions, and minimal - from strongly acid solutions; on passing from acid solutions to neutral and alkaline, the "ultrasonic potential" of the electrode increases, whereas for pH values from 4-8 it is constant; ultrasonic irradiation leads to an increased electrode reaction rate for each pH of the solution. The dependence of the depolarizing effect on the pH of the solution is plotted for various temperature intervals and current densities. 9 references.

[Abstracter's note: Complete translation]

Card 2/2

EXT 11/T/SWP(K) P 14/P 14 SED 'AFWL/AFSC(a)' (BTD/AFETR/ESD(GB)

ACCESSION NR: AR4047552

S/0124/64/000/008/B036/B036

SOURCE: Ref. zh. Mekhanika, Abs. 8B188

AUTHOR: Nikonov, K.P., Kudryavtsev, B.B.

TITLE: Measuring the absorption of ultrasound in a liquid by the flow method

CITED SOURCE: Sb. Primeneniye ul'trakust. k issled. veshchestva. Vy*p. 16. M., 1962, 183-190

TOPIC TAGS: hydromechanics, ultrasonic radiation, ultrasound absorption, liquid flow

TRANSLATION: A simplified method is described for measuring the absorption of ultrasound. Theoretical investigations lead to a formula for the absorption factor $\alpha = \frac{\eta \rho c^2 k}{2(r_1 - r_2) U^2}$

where η is the viscosity of the liquid under consideration; v is the flow velocity; ρc is the acoustical resistance of the medium into which the sound is radiated; U is the voltage on the radiating element; k is a constant for which a computation formula is given; and r_1, r_2 are the distances to the radiating element in the tube. The measurements were carried out at frequencies of 1, 2, 3, 4, 5 and 6 Megacycles/sec. The diameter of the tube was 32-31 mm, and that of the crystal was 35 mm. The results of the measurement of the

Card 1/2

L 20698-65

ACCESSION NR: AR407552

0

absorption factor in toluene and ethyl alcohol are presented in two tables. The measuring chamber was placed in a thermostat in order to eliminate any external influences. A special study was made of the liquid flow in a discharge pipe (with the flow caused by the heat effect), at various positions of the pipe. On the basis of the results of these measurements, a graph is constructed, illustrating the dependence of the flow velocity on the square of the voltage on the radiating element. The tests in ethyl alcohol were conducted at a frequency of 250 kilocycles/sec. in a tube with a diameter of 58 mm. It was noted that a heat flow was observed within 3-4 minutes and reached a steady-state condition within 10-15 minutes. For the sake of increased accuracy, the velocity was tested at each frequency with 4-5 different radiator voltages. Tuning of the radiating element to maximum radiation was found to have a definite effect on flow velocity. The results of the experiments led the authors to the following general conclusions: 1. when measuring the absorption of sound in a liquid by the flow method, it is possible to avoid making a determination of the intensity of the sound without lowering the accuracy of the test method. 2. it is essential to take into consideration the sound absorption heat effect which does have an effect on the flow caused by the sound. The results of these measurements are in good agreement with the findings of other writers. I. Nikolayeva.

SUB CODE: ME

ENCL: 00

Card 2/2

SAMGINA, G.A.; KUDRYAVTSEV, B.B.

Velocity of sound in iodine solutions. Zhur. fiz. khim. 37
no.4:918-920 Ap '63. (MIRA 17:7)

KUDRYAVTSEV, B.B.; NIKONOV, K.P.

Resonance absorption of ultrasound in an acetic anhydride -- ethyl
alcohol mixture. Zhur.fiz.khim. 37 no.8:1887-1891 Ag '63.

(MIRA 16:9)

(Acetic anhydride) (Ethyl alcohol) (Absorption of sound)

KUDRYAVTSEV, B.B.; NIKONOV, K.P.

Temperature dependence of sound absorption in a relaxation
liquid. Zhur. fiz. khim. 37 no.9:2142-2144 S '63. (MIRA 16:12)

1. Moskovskiy oblastnoy pedagogicheskiy institut.

KUDRYAVTSEV, B.B.; AKHALADZE, V.P.; KORCHAGINA, I.I.

Effect of the double layer potential on the rate of wave
propagation along the interface of two liquids. Zhur. fiz.
khim. 38 no.9:2309-2311 S '64. (MIRA 17:12)

KUDRYAVTSEV, B.B.; SAMGINA, G.A.

Speed of sound as an intramolecular property. Zhur. fiz. khim.
39 no.4:902-906 Ap '65. (MIRA 19:1)

1. Submitted Nov. 13, 1963.

L 65266-65 EWT(1)/EPF(n)-2/ETC(m) WW/GG

ACCESSION NR: AR5014407

UR/0056/65/000/004/E006/E003

SOURCE: Ref. zh. Fizika. Abs. 4E41
44 45

AUTHOR: Kudryavtsev, B. B.; Samgina, G. A. 44.5

TITLE: Speed of sound in a liquid as an intramolecular property

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18. 4.,
1963, 101-102 21, 41, 55

TOPIC TAGS: intramolecular mechanics, sound propagation, acoustic speed

TRANSLATION: The authors assume that the propagation of sound in a liquid may be represented as a process which consists of transferral of momentum from molecule to molecule and intramolecular energy transfer. The intramolecular transfer is characterized by the compressibility of a substance at absolute zero, and depends on the properties of the molecule.

GP, NP

ENCL: 00

Card 1/1

L 46292-65 EWT(1)/T/EWP(k) Pf-4/P1-4

ACCESSION NR: AR5012303

UR/0058/65/000/003/H079/H080

SOURCE: Ref. zh. Fizika, Abs. 3Zh492

AUTHOR: Samgina, G. A.; Kudryavtsev, B. B.

TITLE: Measurement of ultrasonic velocity in liquids in the 50-200 kc range

CITED SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 18. M., 1963, 95-99

TOPIC TAGS: ultrasonic velocity, liquid ultrasonic velocity, acoustic interferometry

TRANSLATION: Ultrasonic velocity in liquids (water, benzene, CCl_4) was measured at 20 and 23°C using an acoustic interferometer. The circuit diagram of a low frequency interferometer is shown and a method of fastening a barium titanate radiator is described in detail. Frequency was measured with a local oscillator wavemeter with an error $\leq 0.1\%$. The open surface of the liquid acted as a reflector. The liquid level was lowered by slowly draining it through a lateral outlet at the base of the cylinder. Liquid level was held constant with a cathetometer correct to 0.1 mm. Electrical diagrams of the equipment and a curve showing the relation be-

Card 1/2

L 46292-65

ACCESSION NR: AR5012303

0

tween transmitter and reflector for a frequency of 225 kilocycles (sheet thickness 9.67 mm) are shown. Velocity measurement error was not greater than 0.2%. A table showing the results of measurement of velocity in pure liquids and tabulated data for comparison are presented. Reaction curve sharpness and sensitivity of the method are a function of the type of contact between the measuring cylinder bottom and the sheets of barium titanate, and also a function of bottom thickness. The method allows measurements to be made in the interval of frequencies from several tens of kilocycles to ordinary interferometer frequencies. I. Nikolayeva

SUB CODE: GP

ENCL: 00

Card 2/2

KUDRYAVTSEV, Boris Borisovich; MIKHALKEVICH, T.V., red.

[Physics course; heat and molecular physics] Kurs fiziki;
teplota i molekuliarnaia fizika. Izd.2., Prosveshchenie,
1965. 223 p. (MIRA 18:7)

SECRET - NO DISSEMINATION/INT/CONFIDENTIAL - NO DISSEMINATION

TR/0076/65/019/04/0902/0906

AUTHOR: Kudryavtsev, B. D.; Samgina, C. A.

TITLE: The speed of sound as an intramolecular property

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 4, 1965, 902-906

TOPIC TAGS: sound wave propagation, sonic velocity, molecular compressibility, liquid compressibility

ABSTRACT: The propagation of sound in liquids is treated as a process consisting in the transfer of an acoustic pulse of finite velocity both across the inter-molecular gaps and through the molecules themselves. Because different parts of molecules have different rigidities, the compressibility of molecules can be calculated only approximately. Calculations of the compressibility of diatomic molecules (H_2 , O_2 , N_2 , C_2 , Cl_2 , I_2 , Br_2 , Na_2 , Li_2 , K_2) and simple organic compounds (carbon tetrachloride, benzene, chlorobenzene, toluene, acetone) lead to the conclusion that the compressibility of liquids is determined primarily by intermolecular interactions. Assuming that the volume of a liquid V consists of the volume occupied by the molecules themselves, V_0 , and of the so-called free volume V_f , the authors write the following relation expressing the dependence of the

Card 1/2

L 48985-65

ACCESSION NR: AP5011469

sound velocity c on the compressibility β :

$$c \sim \sqrt{\frac{V}{\beta}} = \sqrt{\frac{V_0 + V_f}{\beta_0 + \beta_f}}$$

where β_0 is the compressibility of the molecules and β_f the compressibility due to molecular interaction. The numerator of the above expression depends primarily on the intramolecular properties, while the denominator is determined by intermolecular properties. Hence, the authors conclude that the speed of sound in a liquid is highly dependent on the intramolecular properties, which are determined, on the one hand, by the finite compressibility of the molecules, and on the other, by the marked influence of molecular dimensions. Orig. art. has: 2 tables and 14 formulas.

ASSOCIATION: None

SUBMITTED: 13Nov63

NO REF SOV: 007

ENCL: 00

SUB CODE: GP

OTHER: 007

Card 2/2 *716*

RYAZANOV, A.I.; KUDRYAVTSEV, B.B.

Depolarizing effect of ultrasound. Prim. ul'traskust. k issl.
veshch. no.13:219-239 '61. (MIRA 16:6)

(Depolarization(Electricity))
(Ultrasonic waves)

KUDRYAVTSEV, B.B.

Molecular interaction in a liquid. Prim. ul'traakust. k issl.
veshch. no.13:323-327 '61. (MIRA 16:6)

(Molecular dynamics)

SHILYAYEV, A.S.; KUDRYAVTSEV, B.B.

Calculation of ultrasound velocities in three-component
liquid systems. Prim. ul'traakust. k issl. veshch. no.13:
307-321 '61. (MIRA 16:6)

(Ultrasonic waves—Speed)
(Solution(Chemistry))

AKHALADZE, V.P.; KUDRYAVTSEV, B.B.

Effect of an electrostatic field on ultrasound propagation in
high polymer solutions. Prim. ul'traakust. k issl. veshch.
no.15:117-127 '61. (MIRA 16:8)

(Ultrasonic waves--Speed)
(Polymers--Acoustic properties)

L 16931-63

EWP(q)/EWT(m)/BDS AFFTC JD

S/076/63/037/004/023/029

AUTHOR: Samgina, G. A., Kudryavtsev, B. B.

53

TITLE: Speed of sound in iodine solutions

PERIODICAL: Zhurnal fizicheskoy khimii, V. 37, No. 4, 1963, 918-920

TEXT: The speed of ultrasound (frequency ≈ 2 megacycles) is measured in solutions of iodine in benzene, ether, and ethyl alcohol. The measurements are made with an ultrasonic interferometer which has an error of not to exceed 0.5%. The speed of sound in solutions of iodine in ether, ethanol, and benzene decreases with the increase in the concentration of iodine; the adiabatic compressibility varies inversely with concentration. The relation of the speed of sound in ethanol solutions of iodine and of the adiabatic compressibility have an anomalous nature which can be explained by the presence in the solution of equilibrium between the solvate complexes and aggregate molecules of I_2 . There is 1 graph and 1 table.

SUBMITTED: June 18, 1963

Card 1/1

L 12619-63 EPR/EPF(c)/EWT(1)/EWT(m)/BDS/ES(v)/ES(w)-2 AFFTC/ASD/
ESD-3/APGC/SSD Pa-4/Pr-4/Pa-4/Pab-4 WW/RH

ACCESSION NR: AP3002938 S/0076/63/037/006/1374/1377 80

AUTHOR: Kudryavtsev, B. B.

TITLE: Reaction energy of a liquid particle

SOURCE: Zhurnal fizicheskoy khimii, v. 37, no. 6, 1963, 1374-1377

TOPIC TAGS: reaction energy, potential energy, energy, liquid particle, hyperbolic equation.

ABSTRACT: Author proposes a binomial equation for calculating the reaction energy E_r of a particle, which is a function of molecular volume v . Equation is written in the form

$$E_r = \frac{A}{v^n} - \frac{B}{v^m}$$

First term is dependent on repulsion forces and second term is dependent upon attraction forces of the particles. The values A, B,

Card 1/2

L 12619-63

ACCESSION NR: AP3002938

n and m are constants. Author then develops this formula to fit special cases. In expressing the potential energy of a liquid at temperatures which are different from absolute zero by an equation containing two hyperbolic terms, the presence of molecules with a positive energy must be considered with the result that the liquid can exist only with the presence of outside pressure. The relationship between the potential energy of a liquid and its volume at various temperatures is expressed by an equation which can be approximated by one hyperbolic term. When using a reaction energy expression which contains one or two hyperbolic terms for calculating various physico-chemical indices of a liquid, only a qualitative agreement between theory and experiment can be obtained. Orig. art. has: 11 equations and 5 figures.

ASSOCIATION: none

SUBMITTED: 26Mar62

DATE ACQ: 16Jul63

ENCL: 00

SUB CODE: CH

NO REF SOV: 002

OTHER: 002

Card 2/2

L 18301-63

ACCESSION NR: AP3004988

S/0076/63/037/008/1887/1891

45

AUTHORS: Kudryavtsev, B. B.; Nikonov, K. P.

TITLE: Resonance absorption of ultrasonics in acetic anhydride-ethanol mixture.

SOURCE: Zhurnal fiz. khimii, v. 37, no. 8, 1963, 1887-1891.

TOPIC TAGS: coefficient of sound absorption, relaxation theory, ultrasonic absorption

ABSTRACT: It was established that the coefficient of sound absorption in an equimolar acetic anhydride-ethanol system at 20C does not agree with the relaxation theory. The experimentally-observed much sharper drop in frequency dependence is nicely explained by resonance absorption of sound. The ultrasonic absorption in the 0.5-5 megacycle/sec. range was measured by the flux method of D. Hall and J. Lamb (Proc. Phys. Soc. 73, 1959, 354), and measured optically in the 3-20 megacycle/sec. range. Active complexes in the reaction mixture cause additional absorption of sound. In acetic anhydride, the anomalous absorption of sound is explained by the relaxation phenomena, caused by disturbance of the equilibrium between the rotatory isomers. Orig. art. has: 3 figures, 5 equations.

Card 1/2 /

KUDRYAVTSEV, B.D.

Feather grass diseases in shepp in Kazakhstan. Veterinariia 33 no.8:
32 Ag '56. (MIRA 9:9)

1. Kurdayskayamezhrayonnaya veterinarno-bakteriologicheskaya labora-
toriya. Dzhambul'skoy oblasti.
(Kazakhstan--Sheep--Diseases and pests).

KUDRYAVTSEV, B.B.; KANATOVA, R.F.

Relation between the velocity of sound in solution and
heat of hydration of a dissolved salt. Zhur.fiz.khim.
39 no.11:2810-2812 N '65. (MIRA 18:12)

OVCHINNIKOVA, L. P., SELIVANOVA, G. V. and KUDRYAVTSEV, B. N.

"Study of the Effect of Starvation on the Quantity of RNA and DNA
in the *Paramecium Caudatum* by the Method of Ultraviolet Cytophotometry."
pp. 52

Institute of Cytology AS USSR Laboratory of Microscopy

II Nauchnaya Konferentsiya Instituta Tsitologii AN SSSR. Tezisy Dokladov
(Second Scientific Conference of the Institute of Cytology of the Academy
of Sciences USSR, Abstracts of Reports), Leningrad, 1962 88 pp.

JPRS 20,634

KUDRYAVTSEV, B.B.; CHIMTDORZHIYEV, D.B.

Propagation of ultrasonic waves in noneaqueous solutions
of electrolytes. Zhur. fiz. khim. 39 no.9:2300-2304
S '65. (MIRA 18:10)

OVCHINNIKOVA, L.P.; SELIVANOVA, G.V.; KHEYSIN, Ye.M.; Primali
uchastiye: BUKHMAN, M.P.; KUDRYAVTSEV, B.N.

Photocytometric study by the ultraviolet ray method of the
effect of starvation on RNA and DNA content in paramecium
caudatum. Sbor. rab. Inst. tsit. no. 3:44-53 '63.

(MIRA 17:7)

1. Laboratoriya mikroskopii Instituta tsitologii AN SSSR.

KUDRYAVTSEV, B.M., inzh.

Mechanization of production processes at the plywood enterprises
of the "Kostromadrevprom" Trust. Der. prom. 14 no.1:22-23 Ja '65.
(MIRA 18:4)

KUDRYAVTSEV, B. V.

Nepal's foreign trade. Vnesh. torg. 27 no. 9:27-30 '57. (MLRA 10:9)
(Nepal--Commerce)

KUDRYAVTSEV, Boris Vasil'yevich; FRUMKIN, B.A., red.; MEL'NIKOVA, Ye.E.,
red.izd-va; TYSHKEVICH, Z.V., tekhn.red.

[Nepal; economy and foreign trade] Nepal; ekonomika i vneshniaia
torgovlia. Moskva, Vneshtorgizdat, 1959. 115 p. (MIRA 12:10)
(Nepal--Economic conditions) (Nepal--Commerce)

VOSKRESENSKAYA, M.N.; ISKANDEROVA, A.D.; KUDRYAVTSEV, B.Ye.

Absolute age of albite-apatite-chlorite carbonate mineralization
in the southern part of the Aldan Shield. Geokhimiya no.11:1122-
1127 N 162. (MIRA 18:8)

1. All-Union Scientific Research Institute of Geology, Leningrad.

KUDRYAVTSEV, D.; TYULENEV, S.; SIL'CHENKO, M.; VORONITSYN, I.

Chromium plating in a self-regulating electrolyte.
Avt.transp. 40 no.11:28-30 N '62. (MIRA 15:12)
(Chromium plating)

KUDRYAVTSEV, D.D.

Hydrochemical characteristics of the Volga branch of the Rybinsk water
reservoir. Trudy Biol. Stantsii "Borok," Akad. Nauk S.S.S.R. '50,
No.1, 35-79.
(CA 47 no.13:6581 '53) (MLRA 3:11)

KUDRYAVTSEV, D I

Bor'ba SSSR za Razoruzheniye (USSR's Struggle
for Disarmament) Moskva, Gosyurizdat, 1954.

N/5
174.7
.K9

51 p.

"Reproduced on Microfilm Under Mic. D-138608."

M.G.

2. Prop. 4. 11/10/43

"Alloys of Iron with Nickel, with High Iron Content. A. T. Gerasimov and D. L. Kuznetsov. *Zhur. Priklad. Khim.* 1942, 15, 204-213; *ibid.* 1943, 16, 2323-2324. (In Russian.) The authors, by dilatation, by thermoelectricity, by electrical conductivity, and by micro-examination, alloys of iron with up to 30% nickel have been investigated. The α - γ transition extends to 28% nickel at temperatures consistent with those given in the literature. The temperatures of α - γ reverse transformation in the range 0 to 28% nickel are consistently considerably higher than the accepted values. The hardening curves of the alloys show a minimum at about 25% nickel; the temperature of the curve shows a break. It is difficult to tell whether this is due to a change in composition and Fe/Ni or to a phase change.

1943

M

2

*Alloys of Iron and Manganese. A. T. Grigor'ev and D. L. Kudryavtsev (*Izvest. Akad. Nauk SSSR, Fiziko-Mat. Nauk*, 1948, 16, (2), 70-81; *ibid.*, 1950, 44, 6297).--[In Russian]. The dilatometric properties, thermal differential analysis, hardness, electrical resistance, and microstructure of iron alloys with up to 50% manganese were studied. Depending on their behaviour with changing temp. and the nature of the constituent phases, the alloys could be divided into several groups: (a) alloys in which the $\alpha \rightarrow \gamma$ transformation occurred at high temp. had a martensitic structure and their hardness and electrical resistance increased sharply upon small additions of manganese; (b) alloys in which the $\alpha \rightarrow \gamma$ transformation took place at low temp. had a twinned structure, a very small transformation temp. interval, and the vol. increased rapidly upon heating; (c) alloys of the intermediate range in which transformation occurred at high as well as at low temp.; and (d) alloys which formed a solid solution of manganese with γ -iron had a rather low hardness, particularly at 30% manganese. Cf. following abstract.

June 1951

M

*Investigation of Iron Alloys with Manganese and Chromium. 1.—The Austenitic Region. A. T. Grigor'ev and D. L. Kudryavtsev (*Izv. Sekt. Fiziko-Khim. Anal.*, 1946, 18, (2), 82-90; *C. Abstr.*, 1950, 44, 5297).—[In Russian]. Alloys containing approx. 4 and 10% chromium and variable quantities of manganese were subjected to dilatometric, thermal, hardness, electrical-resistance, and microstructural analyses. At a manganese content of 0-12%, the $\alpha \leftrightarrow \gamma$ transformation was accompanied by a considerable thermal effect, a sharp vol. decrease on heating and expansion on cooling. The max. hardness was at a point where the $\alpha \leftrightarrow \gamma$ transformation lines ended. This transformation took place over a temp. interval which increased with the manganese content. The $\alpha \rightarrow \gamma$ transformation occurred at a higher temp. than $\gamma \rightarrow \alpha$, thereby forming a hysteresis. The latter increased with the manganese content. The initial and final temp. of $\alpha \leftrightarrow \gamma$ transformation first decreased and then increased with the chromium content. In alloys with 12-30% manganese, the $\epsilon \leftrightarrow \gamma$ transformation was observed at low temp. This transformation was connected with a sharp vol. expansion on heating and contraction on cooling. The thermal effect of this transformation was smaller than that of the $\alpha \leftrightarrow \gamma$ transformation. The $\epsilon \leftrightarrow \gamma$ transformation took place within a narrow temp. interval and was not complete when cooled to room temp. The alloys between these two regions had two kinds of transformation: $\alpha \leftrightarrow \gamma$ at high and $\epsilon \leftrightarrow \gamma$ at low temp. Alloys with ~30% manganese formed a solid solution over a wide range of concentrations and did not undergo transformation in the solid state. Up to 10% chromium did not affect the two transformations. A new constituent was observed in alloys with chromium 4 and manganese 48%, and chromium 10 and manganese 27%. This phase may be identified with α -manganese.

Jan 1 1951

CLASSIFICATION		PROCESS AND PROPERTIES INDEX	
<p><i>CA</i></p> <p>The influence of manganese on the polymorphic transition in alloys of iron with chromium. A. T. Grigor'ev and D. L. Kuznetsov. <i>Bull. Acad. Sci. U.S.S.R., Chem. Ser.</i> 1947, 329-335 (in Russian).— This was an investigation of the 0.6 and 1.4% Mn sections of the Fe-Cr-Mn system up to 22% Cr. The alloys studied were made in a low-silica Al_2O_3 crucible in a high-frequency furnace using electrolytic Cr and Mn and Armeo Fe. The Cr content of the eight 0.6% Mn (actually 0.48-0.82% Mn) specimens covered the range 3.80 to 22.57%, and the Cr content of the seven 1.4% Mn (1.03-1.72%) specimens covered the range 6.65 to 22.07%. Dilatometric curves were obtained for annealed alloys with a Chevenard dilatometer and heating and cooling rates of 200° per hr. The $\alpha \rightleftharpoons \gamma$ transformation disappeared in the 0.6% Mn alloys at 14.56% Cr and in the 1.4% Mn alloys at 15.53% Cr. The min temp. of the γ loop occurred at about 8% Cr for both Mn contents. The temp. of the $\gamma \rightarrow \alpha$ transformation (cooling) falls continuously with increase in Cr content, while the temp. hysteresis of this reaction increases to a value of 400° at 11.27% Cr and 1.4% Mn. The presence of a small amt. of Mn changed the character of the transformation depending on the direction. The transformation on heating is that characteristic of a closed γ loop; the transformation on cooling is characteristic of a diagram having an open γ region. The alloys obtained by the latter process were concluded to be in a nonequilibrium condition, from the results of specific elec. resistance measurements on them. Rockwell hardness values were obtained on specimens homogenized at 1299° and quenched after annealing 15 days at temps. between 891 and 1200°. The results showed that with increasing Mn content the boundaries of the γ loop widen while shifting to a region of lower temp. and higher concn. An investigation of microstructures gave results that agreed exactly with those of the hardness data. The fact that quenching doesn't succeed in retaining the austenite structure was explained by the fact that on cooling the diagram is that having an open γ field. The fact that specific elec. resistance data obtained on annealed specimens with a Thompson double bridge failed to correlate with the other results was explained on the basis of nonequil. structure of these specimens. Values are given for 25 and 101° and are on the order of $4/X \cdot 10^{-6}$. 5 references. A. G. G.</p>		<p><i>Inst. Gen. & Inorg. Chem. U.S.S.R.</i></p>	
<p>ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION</p>			

CATION ELEMENTS		ANION ELEMENTS		PROCESS AND PROPERTIES INDEX	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	
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Influence of Manganese on the Polymorphic Transformation in Iron-Chromium Alloys. (In Russian.) A. T. Grigor'ev and D. L. Kudryavtsev. *Izvestiya Akad. Nauk SSSR, Otdelenie Khimicheskikh Nauk* (Bulletin of the Academy of Sciences of the USSR, Section of Chemical Sciences), no. 2, Mar.-Apr. 1948, p. 165-173.

Two cross sections of the system Fe-Cr-Mn with a constant manganese content of 0.8% and 1.4% respectively and with a variable content of Cr up to 22% were investigated. Data are charted, tabulated, and illustrated by a series of photomicrographs. 20 ref.

Inst. Gen. & Inorg. Chem. im. Kurnakov, AS USSR

ASS-514 METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Microtography + Microanalysis

The $\alpha \rightleftharpoons \gamma$ transformation in the iron-chromium-manganese system. A. T. Grigor'ev, D. L. Kudryavtsev, and N. M. Gerasimova. *J. Applied Chem. U.S.S.R.* 23, 801-8 (1950) (Engl. translation); *Zhur. Priklad. Khim.* 23, 500-74 (1951).—Hardness, microstructure, and dilatometric methods show that the $\alpha \rightleftharpoons \gamma$ transformation in Fe-Cr-Mn system takes place quite uniformly. The closed γ space extends from the binary system Fe-Cr to 13% Mn, gradually dropping and expanding toward the Cr vertex as the Mn concn. increases. The boundary surfaces stop at 13% Mn, and the solid soln. undergoes the $\alpha \rightleftharpoons \gamma$ transformation but remains stable with increasing Mn. With increasing Mn the closed space $\alpha + \gamma$ spreads out toward the Cr vertex and shifts to lower temps.; above 13% Mn, the boundary surfaces leave the Fe-Mn plane and drop to room temp. in the ternary system. The similar binary diagrams for Fe-Ni and Fe-Mn, the martensitic structure of the Fe-Mn and the Fe-Mn-Cr alloys after solidification, and the general structure of the ternary diagram show that diffusion accompanies the $\alpha \rightarrow \gamma$ transformation during heating but does not occur with the $\gamma \rightarrow \alpha$ transformation. R. S. McC.

65-05 EWT(1)/EPA(s)-2/EWT(m)/EPF(s)-2/T/11/11

APR 20 1966

01001/001/002/0188/0192

AUTHOR: Gubskaya, G. F.; Wang, Ping-nan; Luzhnaya, N. P.; Kudryavtsev, D. L.

TITLE: Interactions in Ag-B(III)-C(V) ternary systems

ORIGIN: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 2, 1965, 188-192

TOPIC TAGS: phase diagram, phase equilibrium, eutectic alloy, silver, indium, arsenic, antimony, gallium, semiconductor

ABSTRACT: The study of A(1)-B(III)-C(V) type systems is of interest for production of new semiconductors. The purpose of this research was the production of Ag_3InSb_2 , Ag_3GaAs_2 , Ag_3InAs_2 and Ag_3GaAs_2 compounds and the study of the chemical reactions which take place in alloys with the composition of these compounds. The alloys were prepared by melting together the appropriate elements in evacuated sealed ampoules using vibration mixing. These alloys were then subjected to thermal structural analysis and their microhardness was measured. Cast alloys were studied since thermal treatment has little effect on their properties.

L 52360-65

ACCESSION NR: AP5009366

The results show that the phase diagram of the InAs-Ag_{0.75}As_{0.25} cross section has a pronounced eutectic. Contrary to the theoretical predictions, ternary compounds of the Ag(I)B(III)C₂(V) type are not formed under the investigated conditions in the Ag-In-Sb, Ag-Ga-Sb, Ag-In-As and Ag-Ga-As systems. Ag₃InSb₂, Ag₃InAs₂, Ag₃InAs₂ and Ag₃GaAs₂ are not single phases, but consist of B(III)C(V) type compounds which crystallize first from the melt followed by the eutectic. Orig. art. has: 5 tables and 5 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova
Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of
Sciences SSSR)

ENCL: 00

FILE CODE: IC, CS

OTHER: 000

Kudryavtsev, D.M.
BORODIN, Aleksey Ivanovich; SOKOLOVA, V.Ye., redaktor; KUDRYAVTSEV, D.M.,
retsensent; MEDVEDEVA, L.A., tekhnicheskiiy redaktor

[Preparation of yarn for cotton weaving] Podgotovka priashi k
khlopokkachestvu] Moskva, Gos.nauchno-tekhn.isd-vo Ministerstva
tekstil'noi promysh.SSSR, 1955. 294 p. (MIRA 9:2)
(Cotton weaving)

KUDRYAVTSEV, D. S.

KUDRYAVTSEV, D. S.: "The problem of designing cotton Gobelin fabrics."
Moscow, 1955. Min Higher Education USSR. Moscow Textile Inst. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 47, 19 November 1955. Moscow.

KUDRYAVTSEV, D.S., kandidat tekhnicheskikh nauk.

Remarks about the problem raised concerning the manufacture of
variegated zephyr. Tekst.prom. 16 no.12:65 D '56. (MLRA 10:1)

1. Direktor shelkovogo kombinata imeni Shcherbakova.
(Cotton weaving)

Авторы: KUSTOV, Nikolay Dmitriyevich; KUDRYAVTSKY, D.S., retsenzent; SHUSTOVA, I.B.,
redaktor; DMITRIYEVA, N.I., tekhnicheskij redaktor

[Manufacturing terry cloth] Proizvodstvo makhrovyykh tkani. Moskva,
Gos. nauchno-tekhn. izd-vo lit-ry po legkoi promyshl., 1957. 121 p.
(Textile fabrics) (MIRA 10:11)

KUDRYAVTSOV, D.S.

LEYTES, Lev Grigor'yevich; KUDRYAVTSOV, D.S., retsenzent; ARSEN'YEV, N.N.,
retsenzent; LIOZNOV, A.G., red.; MEDVEDEV, L.Ya., tekhn.red.

[Textile design in harness weaving] Oformlenie tkanei v remiznom
tkachestve. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi
promyshl., 1957. 276 p. (MIRA 10:12)

(Weaving)

KVVK, German Germanovich; ZHENKO, Kira Aleksandrovna; KATULIN, Konstantin Aleksandrovich; KUDRYAVTSEY, D.S., retsenzent; BAKUN, N.K., retsenzent [deceased]; BIRYUKOV, I.D., retsenzent; BAVSTRUKA, N.F., red.; AKSENOVA, I.I., red.; MEDVEDEV, L.Ya., tekhn.red.

[Manufacture of gobelin fabrics] Proizvodstvo gobelenovykh tkani.
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl., 1959.
133 p. (MIRA 13:3)

(Jacquard weaving)

(Gobelin tapestry)

KUDRYAVTSEV, D.S.

Experience in thread breakage control. Tekst. prom. 21 no.1:67-68 Ja '61.
(MIRA 14:3)

1. Direktor Moskovskogo shelkovogo kombinata imeni Shcherbakova.
(Weaving)

TALYZIN, Mikhail Dmitriyevich; LIPKOV, Iosif Abramovich;
MAKHNOVETSKAYA, Rita Borisovna; DOROFYEVA, Lyudmila
Sergeyevna; KUDRYAVTSEV, D.S., retsenzent; DMITRIYEV, I.I.,
retsenzent; FROLOV, A.S., retsenzent; SHTEYNGART, M.D.,
red.; VINOGRADOVA, G.A., tekhn. red.

[Pile fabrics and artificial fur]Vorsovyie tkani i iskusstven-
nyi mekh. Pod/obshchei red. M.D.Talyzina. Moskva, Rostekh-
izdat, 1963. 351 p. (MIRA 16:4)
(Artificial fur) (Textile fabrics)

KUDRYAVTSEV, D. S.; GRANOVSKIY, R. G.

New silk fabrics manufactured by the Shcherbakov Combine.
Tekst. prom. 23 no.3:3-7 Mr '63. (MIRA 16:4)

1. Direktor Shelkovogo kombinata imeni Shcherbakova (for Kudryavtsev). 2. Nachal'nik khudozhestvennogo byuro Shelkovogo kombinata imeni Shcherbakova (for Granovskiy).

(Synthetic fabrics)

VLASOV, Pavel Vasil'yevich; KUDRYAVTSEV, D.S., kand. tekhn. nauk,
retsenzent; TALYZIN, M.D., kand. tekhn. nauk, retsenzent;
BAKHTIAROVA, M.G., red.; VINOGRADOVA, G.A., tekhn. red.

[Studying the possibility of applying radioactive radiation in the standardization of weaving processes] Issledovanie vozmozhnostei primeneniia radioaktivnogo izlucheniia pri normalizatsii protsessa tkachestva. Moskva, Gizlegprom, 1963. 150 p. (MIRA 17:3)

KUDRYAVTSEV, D.S., kand.tekhn.nauk

Control of static electricity in textile manufacture. Tekst.prom.
24 no.1:22-23 Ja '64. (MIRA 17:3)

1. Direktor Moskovskogo shelkovogo kombinata imeni Shcherbakova.

VASIL'YEVA, Valentina Petrovna; GORSKIY, Aleksandr Ivanovich;
KAZARINOV, Yuriy Mikhaylovich; KOLOMENSKIY, Yuriy
Aleksandrovich; KRAYCHIK, Aron Borisovich; KUDRYAVTSEV,
Dmitriy Vasil'yevich; MARMUZOV, Grigoriy Vasil'yevich;
PESTOV, Yuriy Konstantinovich; TOLOKONNIKOV, Sergey
Vasil'yevich; TOLSTYAKOV, Vladimir Sergeyevich;
ZHEREBTSOV, I.P., red.; SOBOLEVA, Ye.M., tekhn. red.

[Design of radio pulse system components] Raschet elementov
impul'snykh radiotekhnicheskikh ustroystv [By] V.P.Vasil'eva
i dr. Pod red. IU.M.Kazarinova. Moskva, Gosenergoizdat,
1963. 429 p. (MIRA 16:7)
(Radio) (Pulse techniques (Electronics))

KUDRYAVTSEV, Edgar Aleksandrovich; TUBOL'TSEV, M., red.; KRECHETOV, A.,
tekhn. red.

[Main roads of technical progress in construction] Osnovnye
puti tekhnicheskogo progressa v stroitel'stve. Moskva, Mosk.
rabochii, 1963. 78 p. (MIRA 16:12)
(Construction industry--Technological innovations)

KUDRYAVTSEV, Edgar Aleksandrovich; KANTER, A.I., red.

[Awakened giants; how to search for and find production potentials] Razbuzheniye bogatyri; o tom, kak iskat' i nakhodit' rezervy proizvodstva. Moskva, Izd-vo "Znanie," 1964. 77 p. (Narodnyi universitet kul'tury: Tekhniko-ekonomicheskii fakul'tet, no.8) (MIRA 17:8)

GARMASHEV, Dmitriy Leonidovich; KUDRYAVTSEV, Fedor Aleksandrovich;
MARKOV, Aleksandr Panteleymonovich; POPOV, V.F., redaktor;
KONTOROVICH, A.I., tekhnicheskiiy redaktor.

[Modern methods of installing marine shafting] Sovremennyye
metody montazha sudovykh valoprovodov. Leningrad, Gos.
soiuznoe izd-vo sudostroitel. promyshl., 1955. 177 p. (MLRA 8:12)
(Shafts and shafting) (Marine engineering)

TRESKUNOV, Petr Iosifovich, ~~KUDRYAVTSEV, P.A.~~, otvetstvennyy redaktor;
SHAURAK, Ye.N., redaktor; FRUMKIN, P.S., tekhnicheskiy redaktor

[Cutter and punch-press operator] Rezhik-pressovshchik. Lenin-
grad, Gos. soiznoe izd-vo sudostroit. promyshl., 1956. 109 p.
(Sheet-metal work) (MLRA 9:10)

POPOV, Vladimir Fedorovich, prof.; MARKOV, inzh., retsenzent.; KUDRYAVTSEV, inzh.,
retsenzent.; IVANOV, zavodskiy spetsialist.; VASILENKO, zavodskiy
spetsialist.; KHARCHENKO, zavodskiy spetsialist.; BRONSHTEYN, zavodskiy
spetsialist.; KOSACH, zavodskiy spetsialist.; ZVORYKIN, zavodskiy
spetsialist.; SUSLENNIKOV, zavodskiy spetsialist.; KUDRYAVTSKY,
P.A., otv. red.; ALEKSEYEVA, M.N., red.; SHISHKOV, L.M., tekhn. red.

[Marine fitter] Sudovoi slesar'-montazhnik. Izd. 2., dop. i perer.
Leningrad, Gos., soluzhnoe izd-vo sudostroito. promyshl., 1958. 161 p.
(MIRA 11:12)

(Marine engineering)

KRYNITSA, Mikhail Nikovayevich; KUDRYAVTSEV, F.A., nauchnyy red.;
VIASOVA, Z.V., red.; LEVOCHKINA, L.I., tekhn.red.

[Rigging and equipment for ship maintenance and repair]
Osnastka i prispособleniia dlia slesarno-montazhnykh rabot
na sudakh. Leningrad, Gos.soiuznoe izd-vo sudostroitoi.
promyshl., 1959. 172 p.

(MIRA 12:10)

(Ships--Maintenance and repair)

GARMASHEV, Dmitriy Leonidovich, kand. tekhn. nauk; KUDRYAVTSEV, Fedor Aleksandrovich, inzh.; MARKOV, Aleksandr Panteleymonovich, inzh.; GERSHTEYN, Yu.S., inzh., retsenzent; ROKHLIN, A.G., kand. tekhn. nauk, retsenzent; ZHIDYAYEV, O.A., nauchnyy red.; OZEROVA, Z.V., red.; KRYAKOVA, D.M., tekhn. red.

[Modern methods of assembling marine shafting] Sovremennyye metody montazha sudovykh valoprovodov. Izd.2., ispr. i dop. Leningrad, Gos. soiuзное izd-vo sudostroit. promyshl., 1961. 280 p.

(MIRA 14:10)

(Shafting) (Ships---Equipment and supplies)

POPOV, Vladimir Fedorovich; TISHKOVETS, I.V., inzh., retsenzent;
KUDRYAVTSEV, F.A., nauchnyy red.; KOROVENKO, Yu.N.,
tekhn. red.

[Shipfitter] Sudovoi slesar'-montazhnik. Izd.3., dop. i perer.
Leningrad, Sudpromgiz, 1962. 206 p. (MIRA 16:5)
(Shipfitting)

ZAYTS, Solomon Il'ich; KUDRYAVTSEV, F.A., inzh., retsenzent; IVANOV, A.F., nauchnyy red.; OZEROVA, Z.V., red.; TSAL, R.K., tekhn. red.

[Technological processes of the repair of auxiliary turbomachines]
Tekhnologiya remonta vspomogatel'nykh turbomekhanizmov. Leningrad, Sudpromgiz, 1962. 339 p. (MIRA 15:6)
(Turbomachines--Maintenance and repair)

KRYNITSA, Mikhail Nikolayevich; KEZLING, G.B., inzh., retsenzent;
TISHKOVETS, I.V., inzh., retsenzent; VLASOVA, Z.V., red.;
KUDRYAVTSEV, F.A., nauchnyy red.; SHISHKOVA, L.M., tekhn. red.

[Equipment for mounting operations on ships] Osnastka dlia mon-
tazhnykh rabot na sudakh. 2., izd., ispr. 1 dop. Leningrad,
Sudpromgiz, 1962. 390 p. (MIRA 16:1)

(Marine engines)

(Shipfitting—Equipment and supplies)

KOMOGORTSEV, Ivan Ivanovich; KUDRYAVTSEV, F.A., prof., otv. red.;
NAZARYANTS, T.M., red.

[History outline of ferrous metallurgy in Eastern Siberia;
the pre-October period] Ocherki istorii chernoi metallurgii
Vostochnoi Sibiri; dooktiabr'skii period. Novosibirsk, Red.
izd. otdel Sibirskogo otd-niia AN SSSR, 1965. 214 p.
(MIRA 18:9)

ACC NR: AP6028160 (A,N) SOURCE CODE: UR/0346/66/000/008/0024/0025

AUTHOR: Kudryavtsev, F. S.; Chistova, Z. Ya.; Syurin, V. N.

ORG: Livestock Disease Research and Production Laboratory, MSKh RSFSR (Nauchno-proizvodstvennaya laboratoriya po bor'be s boleznyami molodnyaka sel'skokhozyaystvennykh zhivotnykh MSKh RSFSR)

TITLE: Hemagglutination reaction as a criterion for evaluating immunity to Newcastle disease

SOURCE: Veterinariya, no. 8, 1966, 24-25

TOPIC TAGS: hemagglutination reaction, immunity, diagnostic medicine, Newcastle disease

ABSTRACT: Results of using a modification of the hemagglutination reaction in diagnosis of Newcastle disease and immunity to it have shown it to be superior to present methods in evaluating immunity to Newcastle disease in fowls. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001/

Card 1/1

UDC: 619:616.988.73-097]:636.5

KUDRYAVTSEV, F.S.; CHISTOVA, Z.Ya.; KULIKOVA, N.S.; BURINSKAYA, N.D.;
SEREBRYAKOVA, A.S.

Use of furazolidone and streptomycin in treating respiratory
Mycoplasma infection in chickens. Veterinariia 42 no.8:38-40
Ag '65. (MIRA 18:11)

1. Nauchno-proizvodstvennaya laboratoriya po bor'be s
boleznyami molodnyaka sel'skokhozyaystvennykh zivotnykh
Ministerstva sel'skogo khozyaystva RSFSR.

KUDRYAVTSEV, G. A.

Kudryavtsev, G. A. "The present state of our knowledge of colibacillosis in young shêep", Sbornik po zootekhnii i parazitologii, Tashkent, 1948, pp. 90-101.

SO: U-3261, 10 April 53 (Lotopis 'Zhurnal 'nykh Statey No. 11, 1949)